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July
WILLROY MINES LIMITED



ANNUAL REPORT FOR THE YEAR ENDED DECEMBER 31, 1970

Concise
ASSOCIATE



LITTLE LONG LAC MINES LIMITED

WILLROY MINES LIMITED

OFFICERS

P. A. ALLEN - - - - - *President*
R. C. STANLEY, Jr. - - - - - *Vice-President*
A. G. WILSON - - - - - *Secretary*

DIRECTORS

J. C. L. ALLEN
P. A. ALLEN
D. M. GIACHINO, P.Eng.
P. K. HANLEY
R. C. STANLEY, Jr.

GENERAL MANAGER

J. I. JARVIS, P.Eng.

TRANSFER AGENTS

Canada Permanent Trust Company, Toronto, Ontario.

AUDITORS

Thorne, Gunn, Helliwell & Christenson, Toronto, Ontario.

EXECUTIVE OFFICE

Suite 400, 112 King Street West, Toronto, Ontario.

WILLROY MINES LIMITED

Report of the Directors

TO THE SHAREHOLDERS:

Your Directors are pleased to present the Annual Report and the Consolidated Financial Statements for the year ended December 31st, 1970, together with the Auditors' Report thereon. The Financial Statements reflect the amalgamation of Willroy Mines Limited, Macassa Gold Mines Limited and Renabie Mines Limited as approved by shareholders at General Meetings of Shareholders held on December 15th, 1970. As Willroy owned all the issued shares of Willecho Mines Limited such shares were cancelled.

The Willroy mine earnings improved from \$582,000 in 1969 to \$1,035,000 in 1970. Although the tonnage milled was down, the increase in average ore grade permitted the Net Smelter Return to be maintained.

Preliminary information on the enriched zone from the 1500 foot to the 1700 foot horizon indicates a reserve of 300,000 tons grading 2.16% copper, 3.30% zinc and 2.27 oz. silver. Further lateral and down-dip exploration and development continues.

Mr. J. I. Jarvis has been appointed General Manager and Mr. H. E. Rutetzki, Mine Manager, Willroy Mines Limited. The detailed report by Mr. Jarvis on the Manitouwadge operation is included.

Your Company's MACASSA gold mine in Kirkland Lake, Ontario, produced a slight profit for the year. On October 19th, 1970, an Agreement was signed with Upper Canada Mines Limited effective November 1st, 1970, granting Upper Canada direction and management of this operation on a fifty-fifty sharing of profits with Upper Canada paying for losses which are recoverable from future profits. Another Agreement, effective March 1st, 1971, was signed with Tegren Goldfields Limited permitting the mining and milling of ore from this adjoining property on a royalty per ton basis. Upper Canada Mines Limited will manage the combined operation as an extension of the first agreement. Occurrences of good grade gold ore were developed at depth on the Tegren property several years ago from the Macassa mine workings. The mining of these orebodies in conjunction with the present Macassa operation is expected to increase daily tonnage which should improve profits. The Report of Mr. J. H. Botsford, Mine Manager, covering operations for the year 1970, is included.

RENABIE mines ceased operations in July 1970. Although the plant and equipment were sold, the property is being retained.

MILTON QUARRIES LIMITED, a wholly-owned subsidiary, produces and sells crushed stone and aggregates to the construction industry. Prices of crushed stone in the Toronto area remained quite stable throughout the year. Profitability improved due to reduced production costs. Studies were begun to relocate the plant in keeping with new environmental standards.

Exploration and development continued at your Company's wholly-owned nickel-copper deposit in Limerick Township in Southeastern Ontario. This orebody is now evaluated as marginal.

It is with deep regret that we record the death of Mr. John D. Bryce on September 9th, 1970. Mr. Bryce gave much valued service as President of Macassa for the past seven years.

The Directors wish to record their appreciation to Mr. J. I. Jarvis, Mr. H. E. Rutetzki, the Staff and all Employees for their loyal and efficient services.

Respectfully submitted,

On behalf of the Board,

P. A. ALLEN,
President.

April 12, 1971

WILLROY MINES LIMITED

January 27, 1971.

Report of the General Manager

To the President and Board of Directors,
WILLROY MINES LIMITED.

Dear Sirs:

I submit herewith my report on the Company's operations at Manitouwadge for the year ended December 31, 1970.

PRODUCTION

The total tons processed from three operations were 476,970 tons which averaged 1,307 tons milled per calendar day. Of this amount, 322,389 tons or 68% were obtained from the Willecho operation, 88,965 tons, equivalent to 19% from the Big Nama Creek property, and the remaining 65,616 tons from the Willroy shaft. The percentage of mill feed from all locations are shown on the following table:

<u>Ore Zone</u>	<u>Tons of Mill Feed</u>	<u>% of Mill Feed</u>
Willroy Shaft: No. 1 Zone	17,692	3.7
No. 3 Zone	47,533	10.0
No. 6 Zone	391	0.1
Willecho Shaft:	322,389	67.6
Total Willroy	388,005	81.4
Big Nama Creek Mines Ltd.	88,965	18.6
	<u>476,970</u>	<u>100.0%</u>

The average grade of all tonnage treated in the Willroy concentrator ran 0.84% copper, 3.97% zinc, 0.17% lead, and 1.80 ounces of silver. Concentrate production totalled 647 cars made up of 206 cars of copper, 419 cars of zinc, and 22 cars of lead. This yielded a gross value of \$8,995,531 and a Net Smelter Return of \$5,986,287 or \$12.55 per ton milled.

Contained metals, along with the returned values, are shown:

	<u>Metal Production</u>	<u>Net Smelter Return</u>
Zinc	30,824,508 pounds	\$1,609,258.
Copper	7,007,083 pounds	3,417,315.
Lead	1,076,845 pounds	55,458.
Silver	520,973 ounces	859,605.
Gold	1,270 ounces	44,651.
		<u>\$5,986,287.</u>

COSTS

Rising costs, because of sizable wage increases, together with higher expenses incurred for supplies and services, required offsetting measures to maintain expenditures within acceptable limits. During the latter part of the year, production from the Willroy shaft was temporarily suspended in order to concentrate on the mining of Willecho and Big Nama Creek. This permitted a modest reduction in the labour force which was further substantially being decreased at year-end as a result of the complete re-organization of all departments.

A comparison of operating costs for the years 1969 and 1970 are as follows:

	<i>Cost per ton Milled</i>	
	<i>1970</i>	<i>1969</i>
Development	\$.32	\$.31
Mining	4.29	4.38
Milling (at cost)	1.65	1.41
Administration and General	1.41	1.29
	<u>\$ 7.67</u>	<u>\$ 7.39</u>
Willroy tonnage milled	388,005	445,449

EXPLORATION AND DEVELOPMENT

The highlight of the year was the enrichment of the Main No. 3 ore zone encountered in the lower incline at the Willecho shaft. This incline, which started from the 1350 foot level some fifty feet under the ore structure, entered the structure at approximately the 1500 foot horizon and has remained in it to the present face at the 1700 foot horizon. During the year 1970, the lower incline advanced 1,119 feet in ore grading 3.69% Copper, 5.12% Zinc and 4.22 oz. Silver per ton. Ore recoveries from this development including muck from the lateral inclines and panels amounted to 54,805 tons with muck grades averaging 2.73% Copper, 4.00% Zinc and 2.86 oz. Silver per ton.

A second development heading at Willecho is being driven out to the No. 2 Zone on the 550 foot level to obtain more specific data on the structure at this depth. The face was advanced a total of 563 feet with an additional 1,500 feet required to reach the initial drilling location.

Development at the Willroy shaft was commenced on the 2600 foot level to check out the depth potential of the No. 3 zone below this horizon. The main haulage drift was extended in a north-easterly direction, after which a series of diamond drill holes was started. Of the three holes completed by year-end, none of the intersections of the zone indicated mineralization of any consequence.

A geochemical survey was carried out on part of the thirty-six claim group situated to the east of Noranda-Geco which was staked during the latter part of 1969. In addition, one surface hole was drilled to a depth of 852 feet in an anomaly previously located by geophysical means. Neither the geochemical survey nor the drill hole confirmed the indicated anomaly.

ORE RESERVES

As of December 31, 1970, the total broken, proven, and indicated ore reserves based on sampling and diamond drilling with a dilution factor of 15%, are as follows:

	<i>Tons</i>	<i>% Cu</i>	<i>% Zn</i>	<i>% Pb</i>	<i>Oz. Ag.</i>
Willroy Shaft	198,778	1.64	2.85	—	0.81
Willecho Shaft	827,523	1.17	3.72	0.15	1.83
Big Nama Creek Option ..	25,662	0.86	5.48	—	0.99
GRAND TOTAL	<u>1,051,963</u>	<u>1.25</u>	<u>3.60</u>	<u>0.12</u>	<u>1.62</u>

In addition to the above, 435,109 tons with a composite grade of 0.51% copper, 3.25% zinc, 0.25% lead, and 1.16 ozs. of silver are indicated in the Willroy No. 1 and 5 zones and the Willecho No. 2 zone. These mineralized areas are excluded from the above reserves because of economic factors.

MINING

Annual production from the Willroy shaft declined as stoping operations were discontinued during the fourth quarter. Development was maintained in the No. 1 and 6 zones and by mutual agreement an exploration heading was driven 365 feet into Noranda (Geco Division) territory. Ore production during the first nine months was obtained from the No. 3 North zone as well as from salvage stopes in the No. 1 and 3 zones. An electric trolley system was established on the 8th level for future haulage from the copper zones when mining is resumed upon termination of the Big Nama Creek operation.

Muck from the Willecho shaft was obtained mainly from the 'B' and 'D' zones above 1350 level and the 'D' zone trackless mining below this horizon. The grade of ore in the lower section being developed for room and pillar mining, is considerably better than mine average. Two ST-5A scooptrams and a Paramatic self-propelled drill jumbo are being used for this work.

Underground work carried out in 1970, which includes Slimlake development carried out through Willroy workings, is summarized below:

DEVELOPMENT

<i>Year</i>	<i>Shaft Sinking Feet</i>	<i>Main Incline Dev. Feet</i>	<i>Drifts & X-Cuts Feet</i>	<i>Raises Feet</i>	<i>Other Excav. Tons</i>	<i>Diamond Drilling Surface Feet</i>	<i>U/G Feet</i>
1955-69	4,746	3,366	67,917	11,293	104,880	201,335	640,860
1970	—	964	3,978	86	5,833	852	53,425
	<u>4,746</u>	<u>4,330</u>	<u>71,895</u>	<u>11,379</u>	<u>110,713</u>	<u>202,187</u>	<u>694,285</u>

STOPING AND STOPE PREPARATION

<i>Year</i>	<i>Dr. & X-Cuts Feet</i>	<i>Sub Drifts Feet</i>	<i>Raises Feet</i>	<i>Other Excav. Tons</i>	<i>Stoping Tons</i>
1955-69	8,519	41,108	62,939	76,230	4,903,821
1970	1,879	323	6,676	9,517	345,447
	<u>10,398</u>	<u>41,431</u>	<u>69,615</u>	<u>86,107</u>	<u>5,249,268</u>

BIG NAMA CREEK PROPERTY

Production from the Big Nama Creek property totalling 88,965 tons with a composite grade of 0.80% copper, 3.76% zinc, 0.06% lead, and 0.99 oz. of silver was processed in the Willroy concentrator. This yielded a Net Smelter Return of \$935,863 or \$10.58 per ton milled from which production costs were recovered and the balance applied to the advance account from Willroy.

Development during the year consisted of extending the main incline roadway in an easterly direction a further 315 feet downslope and driving two crosscuts a total distance of 151 feet at the "C" sublevel horizon located 250 feet below surface. Diamond drilling carried out from these three headings indicated that the zone continued to be irregular and of very narrow width below the "C" sublevel which extends 750 feet along the zone. As a result of the information obtained from these sources, together with economic considerations, a decision was made to abandon any further work below the 250 foot depth.

During initial stoping operations, high dilution factors were being experienced because of the irregularity of the ore zone. This necessitated a change in mining method from benching using trackless

equipment — except in the central area — to conventional shrinkage stoping using electric slushers. This change, together with an increased rate of extraction, proved very beneficial in reversing the unfavourable cashflow position being experienced at mid-year.

Forty-two diamond drill holes having a combined footage of 5,181 feet were drilled through the zone from positions along the main roadway and hangingwall crosscuts to obtain more detailed information on the ore picture. Mineable ore reserve as of December 31st to the 250 foot horizon, including broken tonnage remaining in the shrinkage stopes, was 25,662 tons having a grade of 0.86% copper, 5.48% zinc, and 0.99 oz. of silver. The remaining reserve tonnage previously reported has been written off because of the narrowing of the zone with depth as determined from active workings and drilling, the sizable amount of tonnage tied up in the surface and other permanent pillars, high production costs and the greatly depressed values of base metals.

MILLING

During 1970 several changes were made in the mill flow sheet which accounted for a general improvement in payable recoveries. While the mill rate was slightly lower, there was an increase in the grade of material being treated. The lower operating time was mainly due to a two-week shutdown for annual vacations.

Closed circuit television units have been permanently installed in key locations in the crushing plant and have accounted for a reduction in personnel.

During the warmer weather the compounding area for tailings disposal was substantially increased and a new wood stave line installed.

From July 22, 1957, to the end of the current year, 6,313,303 tons of ore have been processed in the concentrator having a gross value of \$108,655,905 and a Net Smelter Return of \$64,714,718. Of this total tonnage, 4,173,221 tons were mined through the Willroy shaft, 1,980,990 tons at Willecho, and 159,092 tons from the Big Nama Creek property.

Comparative tabulation of the past two years is as follows:

1970								
Average Daily Tonnage — 1,307 Tons					Mill Operating Time — 89.4%			
ASSAYS					RECOVERIES			
	<u>Ag</u>	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>	<u>Ag</u>	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>
Heads	1.80	.84	.17	3.97	100.0	100.0	100.0	100.0
Cu Con.	34.44	24.30	.64	5.56	56.1	85.0	10.5	4.1
Pb Con.	41.60	3.75	34.60	5.70	6.9	1.3	58.5	0.4
Zn Con.	1.43	.45	.12	53.23	4.8	3.3	4.1	82.0
Tailings .....	.64	.10	.05	.59	32.2	10.4	26.9	13.5
Payable Recoveries					63.0	86.3	58.5	82.0

1969								
Average Daily Tonnage — 1,378 Tons					Mill Operating Time — 91.5%			
ASSAYS					RECOVERIES			
	<u>Ag</u>	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>	<u>Ag</u>	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>
Heads	1.63	.61	.19	3.61	100.0	100.0	100.0	100.0
Cu Con.	41.31	22.62	.66	7.33	51.0	81.0	7.8	4.4
Pb Con.	47.97	5.18	36.86	5.75	8.1	2.3	54.7	0.4
Zn Con.	1.44	.39	.23	53.30	4.9	3.5	6.9	81.5
Tailings .....	.64	.09	.06	.54	36.0	13.2	30.6	13.7
Payable Recoveries					59.1	83.3	54.7	81.5

CAPITAL EXPENDITURES

To offset the continuous eroding of profits due to ever-increasing labour and supply costs, capital additions in the order of a quarter of a million dollars were purchased throughout the year.

Most of the major items were purchased for trackless mining at Willecho and included another ST-5A Wagner scooptram (making a total of 4), a Paramatic 3-boom jumbo complete with 5" Tamrock rock drills, and a Model 7000 Ho-Ram rock breaker. Additional pumps, a 42" Axial flow fan, and 14 replacement rock drills were utilized throughout the various other mining locations.

At the Willroy shaft, a 4½ ton trolley locomotive system was purchased and installed for the long ore tram from the copper zones located on the Geco boundary to the main shaft.

Surface expenditures were minimal and included a replacement utility vehicle and stationwagon, a water softener system for the boilers, an 8 x 6 SRL pump for the mill, and television monitoring systems for the crushing plant and Willecho hoist dumping location.

GENERAL

The average work force employed on Willroy operations was 248 employees plus 23 contractors which included caterers, diamond drillers, and security guards. Because of unfavourable metal prices during the second half of the year, reductions in personnel were required to lower costs. The total employees as of December 31st had been reduced to 220 persons and 16 contractors.

On February 8th an extra increase was granted to Willroy employees to maintain competitive rates in the Manitouwadge area. Again on October 6th in accordance with the Collective Agreement signed in 1969, a further increase was incorporated into the wage schedule. The net effect of the above increases was an average 7.6% for all employees.

Underground personnel were in short supply throughout the greater part of the year. However, with the consolidation of mining operations at Big Nama Creek and Willecho in October, miners displaced from Willroy were sufficient to meet the requirements of the other operations. An average monthly turnover of 7.7% was experienced throughout 1970.

The Thunder Bay District Mine Rescue competition was again won by the Willroy Mine Rescue team for the fourth consecutive year.

A further 11 company dwellings were sold to employees under Agreements of Sale. One residence was repossessed because of severance, making a total of 62 units now being disposed of in this manner.

Expenditures during the year for all operations amounted to \$2,145,000 in wages and salaries, \$1,361,000 for supplies, \$2,321,000 for smelter charges, \$182,000 for U.S. duty on zinc exports, and \$507,000 for freight charges on concentrate movements.

Copper shipments were directed as usual to Noranda, Quebec, zinc concentrates to Port Maitland, Ontario, and lead to East Helena, Montana. New contracts were signed with Noranda Sales Corporation Limited in September for all zinc and lead production after December 31st, 1970. Revised smelter and other charges provide for an improved Net Smelter Return.

In conclusion, I wish to record my appreciation to the President and Board of Directors for their consistent support and confidence in the operating staff. At the same time I would like to acknowledge the efforts of the Mine Manager, Department Heads, and all employees, and extend thanks for their loyalty to the company and diligence in carrying out assignments.

The foregoing report is respectfully submitted.

J. I. JARVIS, P.Eng.,
General Manager.

WILLROY M

(Incorporated under the laws of Ontario)
and subsidiary companies

Consolidated Balance Sheet (with comparative figures for 1969)

ASSETS		1970	1969
CURRENT ASSETS			
Cash and short term deposits		\$ 4,436,378	\$ 2,523,669
Bullion, settlements receivable and concentrates in transit, at estimated realizable value		1,578,254	2,056,966
Marketable securities, at cost less allowance for decline in value of \$145,000 in 1970 and \$205,000 in 1969 (quoted market value 1970, \$1,814,000; 1969, \$1,293,700)		1,797,745	1,306,611
Accounts, accrued interest and other receivables (note 2)		724,629	776,149
Supplies and other assets, at cost		722,125	1,097,576
		<u>9,259,131</u>	<u>7,760,971</u>
INTEREST IN OTHER COMPANIES (note 3)		1,139,859	1,486,398
FIXED ASSETS, at cost			
Mineral and other properties		2,274,486	2,346,823
Plant and equipment		12,952,042	15,919,884
		<u>15,226,528</u>	<u>18,266,707</u>
Less accumulated depreciation and depletion		10,796,027	13,212,485
		<u>4,430,501</u>	<u>5,054,222</u>
OTHER ASSETS AND DEFERRED CHARGES			
Preproduction, exploration and development expenditures deferred, less amounts written off		1,689,222	1,585,285
Other items		152,915	167,861
		<u>1,842,137</u>	<u>1,753,146</u>
		<u>\$16,671,628</u>	<u>\$16,054,737</u>

AUDITORS

To the Shareholders of
Willroy Mines Limited

We have examined the consolidated balance sheet of Willroy Mines Limited and subsidiary company, Milton Quarries Limited as at December 31, 1970 and the consolidated statements of income and retained earnings and source and application of funds for the year then ended. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

Toronto, Canada,
February 10, 1971.

IES LIMITED

the laws of Ontario)
Ailton Quarries Limited

as at December 31, 1970

(at December 31, 1969)

LIABILITIES		1970	1969
CURRENT LIABILITIES			
Bank overdraft	\$	44,402	\$ 31,217
Accounts payable and accrued liabilities		823,169	885,401
Income and mining taxes payable		115,823	188,687
Payments received on purchase of dwellings under agreements of sale (note 4)		94,317	51,193
		<u>1,077,711</u>	<u>1,156,498</u>
SHAREHOLDERS' EQUITY			
Capital Stock (note 5)			
Authorized — 10,000,000 shares without par value			
Issued — 7,318,892 shares (1969, 7,268,892 shares)		6,626,055	6,577,055
Contributed surplus		847,832	847,832
Retained earnings		8,120,030	7,473,352
		<u>15,593,917</u>	<u>14,898,239</u>
Contingent liabilities and commitments (notes 6 and 7)			
Approved by the Board			
P. A. ALLEN, Director.			
ROBERT C. STANLEY, Jr., Director.			
		<u>\$16,671,628</u>	<u>\$16,054,737</u>

REPORT

In our opinion these consolidated financial statements present fairly the financial position of the companies as at December 31, 1970 and the results of their operations and the source and application of their funds for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

THORNE, GUNN, HELLIWELL & CHRISTENSON,
Chartered Accountants.

WILLROY MINES LIMITED

and subsidiary company, Milton Quarries Limited

Consolidated Statement of Income and Retained Earnings

Year Ended December 31, 1970
(with comparative figures for 1969)

	1970	1969
PRODUCTION REVENUE	\$ 9,678,528	\$10,860,508
OPERATING EXPENSES		
Production expenses	5,843,065	7,285,453
Marketing expenses	1,177,703	1,169,085
Administrative and corporate expenses	460,618	359,105
Depreciation and depletion	650,027	683,030
Deferred expenditures written off	412,153	435,523
Outside exploration	115,105	8,863
Ontario mining tax	125,946	118,504
	8,784,617	10,059,563
	893,911	800,945
OTHER INCOME		
Income from investments	347,925	175,287
Sundry	198,401	113,162
	546,326	288,449
	1,440,237	1,089,394
Income taxes	104,000	72,000
Income before minority interest and extraordinary items	1,336,237	1,017,394
Minority interest in net income of subsidiary company	10,454	
Income before extraordinary items	1,325,783	1,017,394
EXTRAORDINARY ITEMS		
Gain on investments sold		596,432
Allowance no longer required for decline in value of marketable securities	60,000	
	60,000	596,432
Materials and supplies written off		53,000
Allowance for decline in value of marketable securities		205,000
Provision for loss on advances to another company	200,000	
Provision for loss on shares of an associated company		211,199
Loss on investments sold	56,232	
Amalgamation expense	52,089	
Write down of mining properties to estimated realizable value	67,112	
Loss on bulk sale of fixed assets and supplies	363,672	
	739,105	469,199
	(679,105)	127,233
Net income for the year	646,678	1,144,627
Retained earnings at beginning of year	7,473,352	6,328,725
Retained earnings at end of year	\$ 8,120,030	\$ 7,473,352
EARNINGS PER SHARE (note 5)		
Income before extraordinary items	18¢	14¢
Net income for the year	9¢	16¢

WILLROY MINES LIMITED

and subsidiary company, Milton Quarries Limited

Consolidated Statement of Source and Application of Funds

Year Ended December 31, 1970
(with comparative figures for 1969)

SOURCE OF FUNDS	1970	1969
Income before minority interest and extraordinary items	\$1,336,237	\$1,017,394
Items not involving current funds	1,062,180	1,118,553
	<u>2,398,417</u>	<u>2,135,947</u>
Gain on sale of marketable securities		432,700
Sale of shares in other companies	1,129,627	354,292
Advances from other companies		213,433
Other items	42,112	42,988
	<u>3,570,156</u>	<u>3,179,360</u>
APPLICATION OF FUNDS		
Allowance for decline in value of marketable securities		205,000
Interest in other companies		
Purchases	881,533	318,698
Reclassification from current assets	128,188	56,303
Purchase of fixed assets	454,684	540,107
Repayment of mortgage loans on employees' residences		178,241
Exploration and development expenditures deferred	528,804	365,505
	<u>1,993,209</u>	<u>1,663,854</u>
Increase in working capital	1,576,947	1,515,506
Working capital at beginning of year	6,604,473	5,088,967
Working capital at end of year	<u>\$8,181,420</u>	<u>\$6,604,473</u>

WILLROY MINES LIMITED

and subsidiary company, Milton Quarries Limited

Notes to Consolidated Financial Statements

Year Ended December 31, 1970

1. AMALGAMATION

Willroy Mines Limited was formed on December 31, 1970 on the statutory amalgamation of Macassa Gold Mines Limited, Renabie Mines Limited, Willecho Mines Limited and Willroy Mines Limited. The consolidated financial statements for 1970 and the comparative figures for 1969 have been prepared on a basis to show the combined results of the amalgamating companies and subsidiary company, Milton Quarries Limited, after eliminating inter-company transactions prior to amalgamation.

2. MANAGEMENT AGREEMENT

Under an agreement dated October 19, 1970 Macassa Gold Mines Limited granted to Upper Canada Mines Limited sole and exclusive management of the Macassa mine. The agreement shall terminate December 31, 1980 provided that Upper Canada shall have the right to terminate at any time on one month's written notice.

Under the terms of the agreement (a) Upper Canada Mines Limited shall pay the company an amount equal to any excess of operating costs less revenues from November 1, 1970 as defined in the agreement and (b) the company is to pay a management fee equal to one-half the revenues less operating costs from November 1, 1970 provided that any payments made by Upper Canada Mines Limited under (a) shall be a first charge on the excess of revenues less operating costs in any subsequent periods until Upper Canada Mines Limited has been reimbursed in full. For the period from November 1, 1970 to December 31, 1970 the excess of operating costs less revenues as defined in the agreement amounted to \$59,195 which amount is included in accounts receivable.

3. INTEREST IN OTHER COMPANIES

Shares and debentures in associated companies, at cost	1970	1969
Listed (quoted market value 1970, \$298,700; 1969, \$380,300)	\$ 395,506	\$ 404,802
Other	275,537	581,286
Other shares, at cost less amounts written off (quoted market value 1970, \$189,000; 1969, \$145,200)	345,174	216,986
Advances to associated and other companies	123,642	283,324
	<u>\$1,139,859</u>	<u>\$1,486,398</u>

4. AGREEMENTS OF SALE

The company contracted to sell its houses in the Manitouwadge area to employees. Under the terms of the agreements of sale, title passes to the purchaser only after the company receives full payment.

5. CAPITAL STOCK

The shares issued on amalgamation at December 31, 1970 were as follows:

	Shares	Amount
Macassa Gold Mines Limited	2,454,928	\$3,068,660
Renabie Mines Limited	47,720	58,530
Willroy Mines Limited	4,816,244	3,498,865
Willecho Mines Limited (a wholly owned subsidiary company of Willroy Mines Limited prior to amalgamation)	Nil	Nil
	<u>7,318,892</u>	<u>\$6,626,055</u>

During the year ended December 31, 1970 Macassa Gold Mines Limited issued 25,000 shares (equivalent to 20,000 shares of the amalgamated company) of its capital stock valued at \$25,000 to acquire the minority interest in its subsidiary company, Milton Quarries Limited.

During the year ended December 31, 1970 Willroy Mines Limited issued 30,000 shares (equivalent to 30,000 shares of the amalgamated company) of its capital stock under an employees' stock option plan for a cash consideration of \$24,000.

Incentive stock options are outstanding at December 31, 1970 on 75,000 shares of the company's capital stock exercisable at various dates to August 1975 at prices of \$.80, \$1.38 and \$2.075 per share.

Earnings per share have been computed on the basis of weighted average shares outstanding of the amalgamating companies after conversion to equivalent shares of the amalgamated company.

No material dilution would result from the exercise of the above options.

6. CONTINGENT LIABILITIES

- (a) An action was commenced by Milton Brick Co. Limited in the Supreme Court of Ontario in August, 1969, against Milton Quarries Limited, now a wholly owned subsidiary of Willroy Mines Limited essentially for possession of certain lands leased by it to Milton Quarries and for a declaration that certain royalties and damages are due to it by Milton Quarries. The amount claimed is not specified. Milton Quarries does not admit any liability in this matter and claims that royalties have in fact been prepaid for any stone removed.
- (b) Willroy Mines Limited received assessments increasing its 1965 income taxes by \$82,361. The company has filed notices of objection. On these assessments no tax has been paid and no provision has been made in the accounts therefor.

7. NIAGARA ESCARPMENT PROTECTION ACT

This Act requires that the subsidiary company, Milton Quarries Limited have a permit to continue operations in the Niagara Escarpment. The company has obtained such a permit to November 30, 1971 subject to relocation of the plant and rehabilitation of the quarry for an estimated cost of \$850,000. The permit may be renewed at the discretion of the Minister.

8. REMUNERATION OF DIRECTORS AND SENIOR OFFICERS

The remuneration for the year of directors and senior officers as defined by The Business Corporations Act, 1970 was as follows:

Directors and officers of amalgamating companies who became directors and officers of amalgamated company	\$ 34,467
Directors and officers of amalgamating companies who did not become directors and officers of amalgamated company	15,400
	<hr/>
	49,867
Mine employees	87,770
	<hr/>
	<u>\$ 137,637</u>

WILLROY MINES LIMITED

MACASSA DIVISION

Kirkland Lake, Ontario,
January 31, 1971.

Mine Manager's Report

The President and Board of Directors,
WILLROY MINES LIMITED,
Macassa Division,
Suite 400,
112 King Street West,
Toronto, Ontario.

Gentlemen:

Enclosed herewith is the report on operations of the Macassa Division for the year 1970.

PRODUCTION

	<u>1970</u>	<u>1969</u>	<u>1968</u>
Gross	\$1,385,427	\$1,567,585	\$2,005,838
Tons milled	76,998	86,265	104,408
Recovery per ton	\$17.99	\$18.17	\$19.21

Average prices, in Canadian Funds per Troy ounce gold and silver were \$36.53 and \$1.85. These prices in 1969 were \$37.69 and \$1.93.

Currently (December 1970) these prices are \$35.66 and \$1.66.

Estimated assistance under the Gold Mining Assistance Act is \$375,105.

Bullion recovered and marketed during the year consisted of 37,595 Troy ounces of gold and 6,557 Troy ounces of silver. These figures for the year 1969 were 41,210 and 7,497 respectively.

MILLING

Average tons per calendar day were 211, with a recovery of contained values of 94.04%. This compares with a rate of 236 tons per day and a recovery of 94.6% in the previous year.

From the start of milling operations in 1933, 4,451,903 tons of ore have been milled, from which 1,887,469 ounces of gold and 304,353 ounces of silver have been extracted. Total recovered value of this ore amounts to \$68,669,257 and is equal to \$15.42 per ton.

DEVELOPMENT

Exploration drives were made to the east on the '04 Break on the 5150 and 6450' levels, and to the west on the 6300 and 6450' levels. A length of 300' of good ore was encountered on the 6300' level up to

the west boundary line. A length of 500' of drifting was completed on the 5025' level to bypass a rock burst area on the '04 break.

Raising was largely confined to the 6300 and 6450' levels to satisfy ventilation requirements and for the readying of ore sections for stoping.

Exploratory diamond drilling of the bottom levels was carried out from January to May. Drilling was again instituted in October, mostly as an aid to stoping operations.

For the year 427 lineal feet of new ore grading 0.52 ounces per ton over an average width of 7.6' was developed.

DEVELOPMENT SUMMARY

<u>Year</u>	<u>Sinking</u>	<u>Sinking Equivalent</u>	<u>Drifting</u>	<u>X-Cutting</u>	<u>Raising</u>	<u>Diamond Drilling</u>
1970	—	—	2,832'	3791½'	627	4,250
1969	—	—	4,463'	216'	1,288	10,412
1968	—	—	4,662'	374'	1,631	7,678
Mine to Date	11,863'	1,469'	206,331'	61,208½'	43,414	503,786

ORE RESERVES

Unbroken Ore Reserves as of January 1st, 1971, have been calculated showing tonnage and grades at various cut off points.

	<u>Positive</u>	<u>Probable</u>	<u>Possible</u>	<u>Total</u>	<u>Grade</u>	<u>At \$35.00 Gold</u>
Cut off at 0.35 oz.	191,400	64,100	25,800	281,300	0.4702	\$16.46
Cut off at 0.40 oz.	178,000	59,500	20,000	257,500	0.4819	\$16.87
Cut off at 0.45 oz.	144,200	45,500	16,200	205,900	0.5071	\$17.75

Broken Ore

Tonnage	14,233
Grade ozs./ton	0.3794
Value Gold @ \$35.00	\$13.28

Note: 1. Dilution Factor of 10% applied to grade only.

2. Positive ore — Exposed on at least two sides.

Probable ore — Reserves above ore sections.

Possible ore — Reserves below ore sections.

3. Classed as inaccessible and not included in the above figures, 55,500 tons grading 0.3921 ozs./ton, which represents an increase of 22,800 tons grading 0.4108 ozs./ton over the previous year.

Change in Position During 1970

Unbroken Reserve is down	66,200 tons (0.30 oz. cut off)
Broken reserve is down	5,536 tons
Total reserves are down	71,736 tons

MINING

The drop in production of 9,267 tons from the preceding year is entirely due to the shortage of underground labour.

WATER CONTROL

Total cost of pumping water from the Kirkland Lake Mines was \$52,497.79.

OPERATING COSTS

	<u>1970</u>		<u>1969</u>	
	<i>Tons Milled</i>	<i>Ounces Produced</i>	<i>Tons Milled</i>	<i>Ounces Produced</i>
	76,998	37,372	86,265	41,210
	<i>Cost Per Ton</i>	<i>Cost Per Ounce</i>	<i>Cost Per Ton</i>	<i>Cost Per Ounce</i>
Development	\$ 2.385	\$ 4.915	\$ 3.365	\$ 7.044
Mining	14.596	30.072	13.452	28.159
Milling	4.423	9.113	4.212	8.817
Undistributed Mine Operating Expense	1.289	2.655	.922	1.930
	<u>\$ 22.693</u>	<u>\$ 46.755</u>	<u>\$ 21.951</u>	<u>\$ 45.950</u>
Add:				
Depreciation .....	.520	1.072	.375	.784
Ontario Mining Tax	—	—	—	—
Head Office Administration	1.216	2.505	.996	2.086
	<u>\$ 24.429</u>	<u>\$ 50.332</u>	<u>\$ 23.322</u>	<u>\$ 48.820</u>

MAJOR OPERATING EXPENDITURES

	<u>1970</u>	<u>1969</u>
Wages and Salaries	\$1,074,802	\$1,132,216
Supplies and Services	508,861	566,954
Power (Hydro)	156,262	163,222

CAPITAL EXPENDITURES

Total expenditures were \$114,273. The major amounts in this account included \$3,813 for an Aftercooler (Tube Nest) for the main hoist and compressor and \$106,925 for a Caterpillar Tractor for the Milton Quarries operation at Milton.

ACKNOWLEDGEMENT

The efficient and loyal co-operation of the Staff and Employees, and the support of the President and Board of Directors are sincerely acknowledged.

J. BOTSFORD,
Mine Manager.

TO THE SHAREHOLDERS,
LONG LAC MINERAL EXPLORATION LIMITED:

Submitted herewith is a report covering the activities of your Company for the year ended December 1970.

Interest in your Company is presently divided amongst the following companies: Little Long Lac Mines Limited and Lake Shore Mines, Limited with 25% each, Willroy Mines Limited 20%, and Malartic Gold Fields (Quebec) Limited, Wright-Hargreaves Mines Limited and East Malartic Mines Limited with 10% each.

Company resources were again concentrated on partially developed properties. Exploration costs at this stage are high and expenditures increased from \$346,000 in 1969 to \$520,000 in 1970. Unfortunately disappointing results and declining metal prices were major factors in terminating several projects including the York Harbour in Newfoundland and the Cullowhee project in North Carolina.

In addition to specific projects, your Company was actively engaged in investigating and examining properties for their possible acquisition and development. The Company will continue its policy of participating in exploration ventures with other mining companies thereby broadening its exploration exposure while spreading the inherent risk.

Oil and gas exploration covering two million acres in the Michigan basin was continued with participation varying between 16% and 75% in three separate ventures. Acreage blocks will be selected for the drilling of several exploratory wells for patch and pinnacle reefs in 1971.

Amax Exploration Inc. have taken a working option on your Company's 207 claims contained in two blocks on the extension of the Thompson nickel belt of Manitoba. The option permits them to earn up to 70% interest by spending \$100,000 before July 1972. Further expenditures will be on a participation basis to one million dollars when a new company will be formed. Amax have also reinstated their working option on a group of 49 claims lying further to the north where they will be conducting follow-up geophysical surveys over the more promising areas indicated by previous work.

Two large areas in Northwestern Ontario have been flown with the latest airborne geophysical system. Numerous important anomalies were outlined which preliminary ground follow-up has indicated to be related to metal sulphides. Further detailed surveys will determine which anomalies will be selected for investigation by diamond drilling in 1971. Your Company has a sixty percent interest in this venture.

An option has been taken on a property on the west coast of Newfoundland comprising 38,324 acres. This is underlain by the Bay of Islands Igneous Complex and is known to contain showings of nickel, copper, asbestos and chromium mineralization. Grab samples have assayed as high as 5.2% nickel, 5.0% copper and 0.2% cobalt.

Your Company is participating in a large airborne search for stratified massive sulphide deposits in the N.W.T. Surveys have indicated several hundred individual conductors. A total of 372 claims have been staked and drill testing the best anomalies will be done this summer following detailed selection surveys.

A reconnaissance survey was made of a large area of the Yukon in the search for porphyry copper type deposits. Participation in another venture of this type will again be made under the able management of Derry, Michener and Booth of a large area in British Columbia.

Your Company has a 90% interest in a project to be managed by the Quebec Mining Exploration Company (Soquem) in the Abitibi district of Quebec. A comprehensive exploration program starting with airborne geophysics, will be conducted principally for base metal deposits.

The continued support of our Directors and staff is sincerely appreciated.

Respectfully submitted,

P. D. TIMMS,
Manager.

April 12, 1971



View of WILLROY
headframe, hoist room,
main office, shops and
water tower.



View of WILLECHO
headframe, ore bin,
hoist room, service and
dry facilities and
office.